

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)

Revision of the Commission's)
Rules to Ensure Compatibility)
with Enhanced 911 Emergency)
Calling Services)

CC Docket No. 94-102
RM-8143

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COMMENTS OF NORTHERN TELECOM INC.

Northern Telecom Inc. ("Nortel") hereby submits supplemental comments in this proceeding addressing the recently filed "Consensus Agreement" between wireless industry representatives and public safety representatives.^{1/} While Nortel was not a contributor to the Consensus Agreement, as described below Nortel generally supports that agreement. Nortel does have a few concerns with respect to some of the implementation deadlines, however.

1/ Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Services, Public Notice, DA 96-198, released February 16, 1996. The consensus was reached based on discussions among the Cellular Telecommunications Industry Association, National Emergency Number Association, Association of Public-Safety Communications Officials, and National Association of State Nine One One Administrators, and addresses the wireless issues raised in this proceeding. Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Services, 9 FCC Rcd 6170 (1994) (hereafter cited as "NPRM").

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Nortel fully supports the underlying goal of this proceeding -- to enhance the utility of E-911 services. Nortel recognizes that E-911 services have the demonstrated capability of saving lives and property. Nortel has been an active participant in this docket^{2/} and in many of the industry efforts that seek to further expand the functionality and availability of E-911 services, including the work of the Personal Communications Industry Association ("PCIA"), the Telecommunications Industry Association ("TIA") and the Joint Experts Meeting ("JEM").

Nortel is the leading global supplier, in 90 countries, of digital telecommunication switching systems, supplying systems to businesses, universities, local, state and federal governments, the telecommunications industry, and other institutions worldwide. The company employs more than 22,000 people in the United States in manufacturing plants, research and development centers, and in marketing, sales and service offices across the country.

Among its activities in the United States, Nortel is a leading manufacturer of network equipment used by local exchange carriers ("LECs") and interexchange carriers ("IXCs"). In addition, Nortel manufactures cellular switching and transmission systems, and is a supplier of switching and transmission systems for Personal Communications Services ("PCS") as well. Finally, Nortel manufactures data base equipment and telephone operator

2/ See Comments of Northern Telecom Inc. filed January 9, 1995; Reply Comments of Northern Telecom Inc., filed March 17, 1995.

stations that are utilized by Public Safety Answering Points ("PSAPs").

All of these Nortel product lines may be affected by the Commission's proposed rules to enhance the utility of wireless E-911 services. Thus, Nortel is highly interested in the Consensus Agreement modifying the Commission's proposal to establish new requirements for wireless services in order to ensure that wireless technologies are fully compatible with E-911 services.

Nortel supports the Consensus Agreement suggestion of a two-phased approach to implementation of automatic number identification ("ANI") and automatic location information ("ALI"), rather than the three-phased approach proposed in the NPRM in this proceeding. Nortel is concerned, however, with the time that would be allowed to deploy the new Phase I functionalities. The parties indicated that 12 to 18 months from adoption of a Commission Order would be adequate.^{3/} However, Nortel believes that this will not be sufficient to allow for deployment of these functionalities.

While the changes required to support the Phase I functions are not inordinately complex, it will still take significant time to deploy these capabilities. Nortel believes that it will require more than 12 months to complete the development, testing, field trials and deployment of the necessary changes. In light of the complex nature of the

^{3/} Consensus Agreement at n. 1.

telecommunications networks and the critical services at issue (i.e., E-911), Nortel does not believe it would be wise to attempt to compress the schedule for completing each of these tasks. Indeed, Nortel believes that it may require 24 months after adoption of an Order to complete the process.

The Consensus Agreement also addresses the transfer of cell site information via a pseudo-ANI, as well as the provision of caller ANI from wireless service users calling 911.^{4/} In many instances today, either the pseudo-ANI or the caller ANI, but not both, is transferred using central automated message accounting ("CAMA") trunks. The design of the CAMA trunks limits the information provided to seven digits (excluding the numbering plan digit). Therefore, in order to be able to transfer both the caller ANI and the pseudo-ANI, it will require the use of a signalling mechanism other than CAMA, such as Feature Group D trunks.

Even in the case of Feature Group D, it will be necessary to make some modifications. By way of example, it may be necessary to replace the called 911 digits with the pseudo-ANI. E-911 information provided in this format consequently will also have an impact on the wireline systems receiving that information, such as selective routers. Thus, Nortel believes that the Commission must allow adequate time for the industry to develop standards to ensure that there will be consistent implementation nationwide.

^{4/} Consensus Agreement at p. 1.

The Consensus Agreement additionally addresses the ability of the PSAP to call back the mobile caller if the call is disconnected. The Consensus Agreement indicates that this ability to use the ANI to call back the caller renders it unnecessary to incorporate an "automatic re-ring" feature at this point.^{5/} Nortel supports this aspect of the Consensus Agreement. At the same time, the public safety communicators must understand the limitations of the caller ANI. Presumably the call back number will be the caller ANI presented to the PSAP, which will normally be the caller's Mobile Identification Number ("MIN"). In most cases the MIN will translate to a 10 digit dialable number in the North America Numbering Plan, but not in all cases.^{6/}

Alternative solutions have been suggested using a temporary local directory number ("TLDN") that is assigned by the serving wireless switch. While the TLDN solution overcomes many of the potential problems with a MIN-based ANI, Nortel does not believe that this type of solution can be implemented within the

^{5/} Consensus Agreement at pp. 4-5.

^{6/} For example, Nortel is aware of the practice in Canada of sometimes marketing mobile phones with a MIN already incorporated into the phone, where the MIN does not translate into a dialable number. Because there are cellular roaming agreements between U.S. and Canadian carriers, it is possible that these types of phones could be used to make E-911 calls in the United States by Canadian subscribers. As another example, if the mobile service customer's handset is not in a call delivery active state, then the attempted call back to the home system of the mobile user will simply indicate that the call to the mobile subscriber cannot be completed. This situation can arise because all mobile systems do not automatically place the mobile handsets into the call delivery active mode when the subscriber is roaming, but rather require a separate manual activation.

Phase I time frame. Therefore, despite its limitations, Nortel recommends that the Commission allow use of the MIN solution for the Phase I implementation, and study other solutions (such as TLDN) for the longer term.

As explained in these comments, Nortel believes that the public interest would best be served if the Commission takes into account the concerns expressed herein when considering the Consensus Agreement.

Respectfully Submitted,

A handwritten signature in dark ink, appearing to read "Stephen L. Goodman", is written over a horizontal line.

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